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## **Leaders facilitate work engagement**

### **A study on frontline employees in a Danish retail bank**

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# Leaders facilitate work engagement:

## A study on frontline employees in a Danish retail bank

Renata Møllu, Bettina Gribby & Jeanette Lemmergaard

### Abstract

Recent research focuses on the influence of positive leadership styles on employee perceptions of job resources as mediators of the relationship between the former and work engagement. This cross-sectional survey study explores the contribution of job resources provided by the immediate supervisors in explaining the variance in employee work engagement scores. The uniqueness of this study lies in that we differentiate the contribution of the immediate supervisor by compiling the measure tapping the specific construct. The study shows that 19,6% of the variance in employee work engagement scores can be explained by intrinsic job resources provided by immediate supervisors.

### 1. Introduction

Nowadays, particularly in knowledge-based organisations, employees tend to view their identities as attached to their education and realisation of their professional goals rather than to the organisations they work for (Larsen, 2009). This alters the nature of demands placed on leaders and calls for a focus on motivational constructs.

Although leadership and work engagement research has been flourishing (Bakker, 2011; Yukl, 2012), questions remain about the leader's role in facilitating work engagement (Bakker et al., 2011). Recent studies investigated job resources (JR) as mediators of the link between specific leadership styles and work engagement (Breevaart et al., 2014; Tuckey et al., 2012). However, since employee perceptions of JR can be influenced by many organizational factors, we argue that it is important to explore how much of the variance in work engagement scores can be explained by JR directly provided by the immediate supervisor.

The paper is structured as follows: First we present theoretical and methodological aspects of the study; then we report and discuss the findings as well as implications for theory and practice. A conclusion closes the paper.

## 2. Theoretical perspective

Work engagement is defined as a »positive, fulfilling, work-related state of mind that is characterized by vigour, dedication, and absorption«. We adopted this definition for the following reasons. First, it views engagement as a construct of its own. Second, it offers a pre-established work engagement measure – the Utrecht Work Engagement Scale (UWES; Schaufeli & Bakker, 2004; Schaufeli et al., 2006). Third, the construct has been tested in a number of studies (e.g., Bakker et al., 2007; Hu et al., 2011; Llorens et al., 2007).

According to the Job Demands-Resources (JD-R) model (Bakker & Demerouti, 2007, 2008), work engagement is a function of the interplay among several factors, i.e. job demands, JR, and personal resources. Job demands are requirements posed by the job involving physical, emotional or mental effort, and can lead to exhaustion (Demerouti et al., 2001), whereas JR (e.g., Bakker & Demerouti, 2007; Bakker & Demerouti, 2008; Crawford et al., 2010; De Lange et al., 2008) and personal resources (Mauno et al., 2007; Xanthopoulou et al., 2009a) are predictors of work engagement. JR refer to the aspects of the job that help to achieve job goals via reducing demands or stimulating personal growth (Demerouti et al., 2001). They can be extrinsic to the job (i.e. located outside the job activity) or intrinsic to the job (i.e., inherent in the job activity itself). Personal resources are »aspects of the self that are generally linked to resiliency« (Hobfoll et al., 2003, p. 632); they interact reciprocally with JR and affect work engagement (Xanthopoulou et al., 2007, 2009a).

Although both JR and personal resources are predictors of work engagement (Bakker & Demerouti, 2008; Xanthopoulou et al., 2009a), JR are arguably more identifiable in an organisational setting. Therefore, we chose to focus on JR, and in particular, intrinsic JR. Specifically, we chose autonomy, performance feedback, and opportunities for development, due to their strong motivational potential (Bakker et al., 2003).

### 2.1. *Leader's role*

While interest in mechanisms underlying leaders' role in fostering work engagement is not new (e.g., Bakker, 2011; Salanova et al., 2011), many questions remain (Bakker et al., 2011). One way of explaining processes behind leaders' influence on followers is through employee perceptions of their jobs. Indeed, job characteristics (i.e., skill variety, task identity, task significance, autonomy and feedback) indirectly increase intrinsic motivation (Hackman & Oldham, 1980), and thus are likely mediators of the process. In fact, job characteristics conceptually resemble intrinsic JR (Bakker et al., 2003; Demerouti et al., 2001) which this study focuses upon.

Leaders' influence on employee perceptions has been investigated empirically. Griffin (1981) showed that employee perceptions of job characteristics can be explained by their leaders' behaviour. Piccolo and Colquitt (2006) found higher levels of perceived

job characteristics were found among employees managed by transformational leaders. Similarly, role clarity and opportunities for development were shown to mediate the link between transformational leadership and employee well-being (Nielsen et al., 2008). These studies indicate that leaders can influence perceptions of job characteristics of their followers.

Other studies focused on the link between leadership styles and work engagement with JR and job demands as mediators. Breevaart et al. (2014), found that autonomy and support mediated the relationship between transactional and transformational leadership and daily work engagement. Tuckey et al. (2012) showed that cognitive demands and resources acted as mediators between empowering leadership and work engagement. The findings suggest that JR can be influenced by different leadership styles and account for variance in followers' work engagement.

It is, though, arguable that employee perceptions of JR are influenced by a variety of factors, so that managerial practices can only explain some variation in employee perception of JR. Furthermore, focusing on specific leadership styles may result in leaving out other indicators of leadership potentially playing a role in the process. Therefore, it is relevant to examine the unique contribution of JR provided by the immediate supervisor in explaining the variance in work engagement scores; and in doing so to focus on the immediate supervisor as the source of JR as opposed to a leadership style. Thus, the research question addressed here is: how much of the variance in work engagement scores can be explained by the JR directly provided by the immediate supervisor?

Distinguishing the unique contribution of the immediate supervisor as a provider of JR is important, because it is conceivable that the same JR are available to employees from a variety of sources other than the immediate supervisor. For instance, the degree of autonomy at work can be dependent on the job description. Similarly, opportunities for development can be provided by an organization uniformly to all incumbents of a certain job. Similarly, performance feedback can be part of a standardized organizational practice, e.g., customer feedback is reported to the respective employee. Consequently, sources and perceptions of JR will vary depending on the organizational context. The immediate supervisor, however, can be seen as a constant source of JR for employees. As a result, discriminating the immediate supervisor's contribution can tell us more about how to allocate JR in an organization to achieve higher work engagement.

## *2.2. The organizational setting*

The data were collected in a Danish retail bank among frontline customer service employees. There are several reasons for focusing on this employee group. First, frontline staff are an important sources of organizational value creation (Barnes & Collier, 2013)

and service quality (Malhotra et al., 2013). Moreover, engagement levels of service employees are positively related to business unit performance (Xanthopoulou et al., 2009b). In retail banking, these employees are responsible for customer service and sales, and are, therefore, essential in terms of organizational performance. This makes their work engagement a significant consideration for the industry.

Furthermore, job descriptions of the surveyed employees are highly similar, and they are employed with the same organization characterized by high level of procedure standardization. Therefore, it is assumed that the study population is a homogeneous occupational group. Thus, it can be argued that JR available to the employees from other sources than the immediate supervisor are highly comparable.

The next section will outline methodology employed in the study.

### **3. Method**

This study is based on cross-sectional data from two surveys. 250 private and personal client advisors were approached for participation in the first survey and 80 for the second survey. The target population amounted to 1,735 ( $N = 1,735$ ), 678 were men and 1,057 were women. Age ranged from 23 to 67 ( $M = 43.9$ ;  $SD = 12$ ). A stratified random sample ( $n = 250$ ) was drawn to keep proportions of the sample and the target population similar. The flow of participants through the study is displayed in Figure 1.

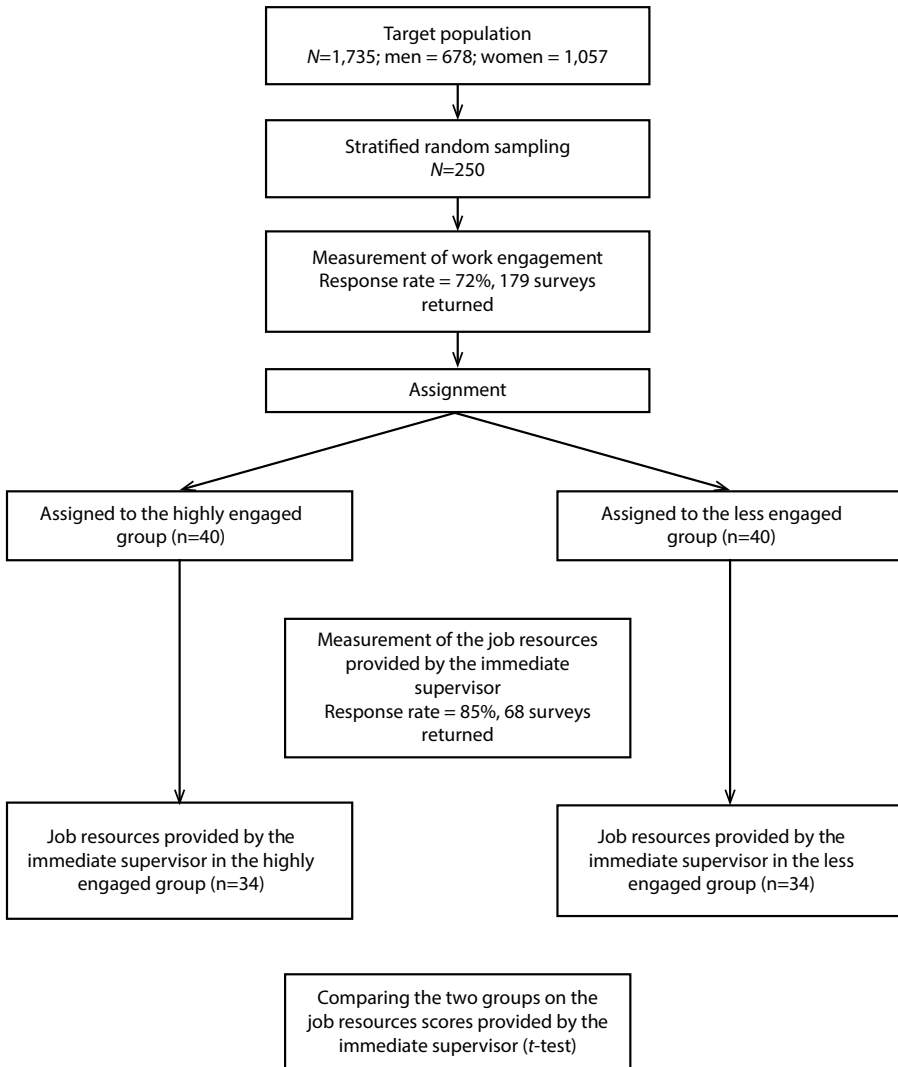
#### **3.1. Procedure**

In both surveys, respondents received an e-mail with a link to the electronic survey. First, work engagement was measured (response rate of 72% with 179 usable questionnaires). Then the obtained scores were used to assign the respondents into two non-equivalent groups: 40 respondents with the highest work engagement scores were assigned to the 'highly engaged group' and 40 respondents with the lowest scores – to 'the less engaged group'. Second, the survey measuring perceptions of JR provided by the immediate supervisor were administered to the two groups (response rate of 85% with 68 usable responses – 34 from each group). The scores obtained by the groups were explored in relation to work engagement scores. Additionally, the two groups were compared to examine whether they differ in the perceptions of JR. This strategy allowed examining whether the variation in perceptions of JR provided by the immediate supervisor is substantial and can act as an important factor explaining variance in work engagement, given that other factors might also influence work engagement. A unique employee code was used to match the data from both data collections.

#### **3.2. Measures**

Work engagement was measured with the Utrecht Work Engagement Scale (UWES-9) tapping the three dimensions of work engagement (vigour, dedication and absorption).

**Figure 1. Flow of participants through the study (adapted from Cooper, 2008, p. 846)**



UWES-9 is a nine-item scale with response categories ranging from 0 (*never*) to 6 (*always*) (Schaufeli et al., 2006). The composite work engagement score was used for analysis.

Employee perceptions of the specific JR (autonomy, feedback, and opportunities for development) provided by their immediate supervisor were measured with a nine-item survey compiled for this purpose. As recommended by Churchill (1979), a multi-item measure was developed. First, we specified the domains of the construct and their operational definitions; then we generated items sampling these domains (see

Appendix A). To increase validity and reliability of the measure (Sudman & Bradburn, 1982), the items were adapted from previous studies. The response categories were ranging from 0 (*not at all*) to 6 (*to a very great extent*). The surveys were back-translated to Danish as suggested by Prieto (1992).

The content validity of the second survey was assessed with the procedure similar to the one described by Hinkin (1998) and MacKenzie et al. (1991). A focus group of four were asked to match the items with the operational definitions (see Appendix A). An »unclassified« domain was provided for the items not corresponding to any of the domains. The focus group accurately matched all items with the domains.

3.3. Strategy of analysis

Since JR are assumed to predict work engagement (Bakker & Demerouti, 2007), regression analysis, specifically linear regression, was used to explore the relationship between work engagement and employee perceptions of JR provided by the immediate supervisor (Bryman & Cramer, 2011). In order to test for significant differences between the groups t-test for independent samples was used.

4. Findings

Mean values, standard deviations and reliability statistics for both data collections are presented in table 1.

Table 1. Mean values, standard deviations, and Cronbach's α of the study variables				
Variable	N	Mean	SD	Cronbach's α
Work engagement	179	4.86	0.83	.92
Work engagement	68	4.71	1.15	.96
JR provided by the immediate supervisor	68	4.25	1.01	.94

Work engagement level ( $M = 4.86$ ;  $SD = 0.83$ ) was found to be high (Schaufeli & Bakker, 2004). The scores are generalizable to the target population, because the characteristics of the respondents were compared to the parameters of the target population, and no significant differences were found.

Generalizability of the results of the second data collection is limited due to a non-probability sampling method. Descriptive statistics for work engagement and employee' perceptions of JR in the two groups are presented in table 2.

**Table 2. Descriptive statistics for work engagement and perceptions of JR in the two groups**

Variable	Groups	N	Mean	SD	Min.	Max.
Work engagement	The highly engaged group	34	5.76	0.18	5.56	6.00
	The less engaged group	34	3.66	0.61	1.89	4.44
JR provided by the immediate supervisor	The highly engaged group	34	4.61	0.85	2.45	6.00
	The less engaged group	34	3.90	1.04	1.22	5.78

Work engagement scores were high in the highly engaged group ( $M = 5.76$ ;  $SD = 0.18$ ). The less engaged group had lower scores ( $M = 3.66$ ;  $SD = 0.61$ ), with a greater variation in responses. High JR scores were observed in the highly engaged group ( $M = 4.61$ ;  $SD = 0.85$ ), while the less engaged group showed lower scores ( $M = 3.89$ ;  $SD = 1.04$ ). Significant positive correlation between work engagement and the JR scores ( $r(66) = .44$ ,  $p < .01$ ) was found (see Table 3). Since the data were treated as interval data, Pearson's correlation coefficient was employed (Bryman & Cramer, 2011).

**Table 3. Correlation among study variables (n=68)**

Variable	1	2
1 Work engagement	1	.44*
2 JR provided by the immediate supervisor	.44*	1

\* $P < .01$

The regression analysis (Table 4) showed that 19,6% of variability in work engagement scores can be explained by employee perceptions of JR provided by the immediate supervisor, hereby indicating that the former can be predicted by the latter.

**Table 4. Regression analysis for work engagement and JR (n=68)**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.44*	.196	.184	1.038

$P < .001$ . Predictors: (Constant), JR provided by the immediate supervisor. Dependant Variable: Work engagement

Next, the highly engaged and the less engaged groups were compared in their perceptions of the JR provided by the immediate supervisor, and significant differences between the two groups were found (Table 5).

**Table 5. t-test for independent samples**

Variable	Group mean values		t	df
	Highly engaged group	Less engaged group		
JR provided by the immediate supervisor	4.611	3.898	3.096	66

\* $P < .003$



This finding strengthens the results of the regression analysis. It indicates that albeit there many factors influencing the variance in work engagement scores (Bakker & Demerouti, 2007, 2008), the unique contribution of JR provided by the immediate supervisor is an important factor explaining this variance.

## 5. Discussion

We found that a significant amount of the variance in work engagement scores can be attributed to employee perceptions of specific intrinsic JR provided by the immediate supervisor. The finding is discussed in more detail in the following, and we start with elaborating work engagement scores.

### 5.1. *High work engagement scores*

High work engagement scores can be explained by the presence of JR, personal resources or both (Bakker & Demerouti, 2008; Xanthopoulou et al., 2007). Due to the extent of perceived JR provided by the immediate supervisor among the respondents, an assumption that high work engagement scores result solely from personal resources or JR available from other organizational sources can be excluded. Therefore, personal, other job resources and the three JR provided by the immediate supervisor are likely to co-occur.

### 5.2. *Job resources provided by the immediate supervisor*

It was found that 19,6% of variance in work engagement scores can be explained by employee perceptions of JR provided by the immediate supervisor (see Table 4). Although the JR measured were those provided by the immediate supervisor, this result agrees with the premises of the JD-R model (Bakker & Demerouti, 2007, 2008), and is in line with other empirical studies suggesting that JR are common antecedents of work engagement (e.g., Balducci et al., 2011).

Furthermore, significant differences were found between the highly engaged and the less engaged group in employee perception of JR. According to the JD-R model, it is expected that higher work engagement scores co-occur with higher JR scores whereas lower work engagement scores coincide with lower JR scores (Bakker & Demerouti, 2007, 2008), which is also observed in this study. Another explanation of the result might be the reciprocal relationship between personal resources and JR (Xanthopoulou et al., 2007, 2009a). Specifically, respondents from the highly engaged group could possess more personal resources and/or JR available from organizational sources other than the immediate supervisor; this in turn would boost employee perceptions of JR provided by the immediate supervisor. Correspondingly, the less engaged group might include respondents with fewer personal resources and/or JR available from alternative

organizational sources, and, hence, less perceived JR. However, the absence of measurement of personal resources and other types of JR denies any conclusions in this regard.

The JD-R model, however, offers only partly explanation of the differences found between the two groups. It is, therefore, interesting to attend to the given organizational setting. The homogeneous nature of the population presumes that job content as well as general characteristics of the working environment are alike. This allows for an assumption that JR obtainable from organizational sources other than the immediate supervisor are highly comparable among the respondents. This can, in particular, be argued in the context of intrinsic JR addressed here. For instance, job descriptions of the respondents were similar; and considering rules and procedures guiding decision-making in retail banking (Finanstilsynet, n/d), it is arguable that the level of autonomy in the job is equal among the respondents. Likewise, opportunities for development and growth offered by the job are comparable within the occupational group. Also, performance feedback available via performance management practices or from the job is argued to be highly similar. Along this line of argumentation, it can be suggested that the two groups differing in their work engagement scores are highly similar in terms of the JR provided by the organization and the job. In a similar vein, the homogeneous occupational group is facing same job demands. Thus, while within the JD-R model variation in work engagement scores can be viewed as a function of a complex interaction among JR, job demands, and personal resources (Bakker & Demerouti, 2007, 2008; Schaufeli & Taris, 2013), the JR and job demands are alike within the given occupational setting. Consequently, the significant difference found between the two groups in perceptions of the JR provided by the immediate supervisor strengthens the prominence of the contribution made by the immediate supervisor in providing these resources to employees. This finding is important because it shows that the JR provided exclusively by the immediate supervisor are vital and make a significant contribution to work engagement of the employees given that other JR and job demands are similar. If the differences between the groups were not found, that would be an indication of that other variables play more important role in explaining the variance in work engagement scores.

## 6. Implications for theory and practice

Although many factors can impact employee work engagement (Bakker & Demerouti, 2007, 2008), this study shows that the intrinsic JR provided by the immediate supervisor can explain a significant variance in employee work engagement scores. Previous research has predominantly been focusing on leaders' influence on job characteristics acting as mediators between specific leadership styles and work engagement (Breevaart et al., 2014; Tuckey et al., 2012). This study, however, is unique as it dis-

tinguishes the contribution of JR provided *directly* by the immediate supervisor to employee work engagement.

Given similar job demands and JR among employees, leaders' role in providing intrinsic JR to employees is essential and can be leveraged to stimulate work engagement. For instance, leaders' can be trained to pay attention to and offer intrinsic JR to followers. Furthermore, leadership behaviours promoting intrinsic JR among employees could be encouraged by organizations via implementing these in leader performance evaluations. Additionally, given the findings of this study it would be reasonable to allocate the responsibility for many extrinsic JR to human resource management departments, whereas leaders could focus more on intrinsic JR and attend to the needs of individual employees.

Future research should include intrinsic and extrinsic JR available to employees from both, the leader and other sources, to assess the comparative contribution of the former and the latter.

## 7. Limitations

First, use of self-administered questionnaires can increase measurement error due to reliance on subjective responses (Sudman & Bradburn, 1982) and common method variance (Podsakoff et al., 2003). Second, lack of control for other factors, e.g., job demands and personal resources, poses threat to validity of the findings as their impact on the measures cannot be estimated. Third, cross-sectional data does not allow for making inferences about the direction or causality of the relationship between the variables.

## 8. Conclusion

This study addressed the question of how much of the variance in work engagement scores can be explained by employee perceptions of JR solely provided by the immediate supervisor. While previous research explored how positive leadership styles impact work engagement via employee perceptions of job resources (Breevaart et al., 2014; Tuckey et al., 2012), uniqueness of this study is in that we distinguished the contribution of employee perceptions of JR provided solely by the immediate supervisor to explain variance in employee work engagement.

To do so, two surveys were administered to frontline employees in a Danish retail bank. First, work engagement was measured. Based on work engagement scores respondents were assigned into two groups, i.e. highly engaged group and less engaged group. Second, the employee perceptions of the JR provided by the immediate supervisor were estimated by the measure developed to tap the construct. The scores were compared between the groups.

We found that 19,6% of variance in work engagement scores can be attributed to the employee perceptions of the intrinsic JR provided by the immediate supervisor. Furthermore, significant differences were found between the two groups. Together, these findings suggest that while many factors contribute to work engagement (Bakker & Demerouti, 2007, 2008), the unique role of the leader should be viewed as vital in achieving an engaged workforce.

## References

- Aguinis, H., Gottfredson, R.K., & Joo, H. 2012. Delivering effective performance feedback: The strengths-based approach, *Business Horizons*, 55(2): 105-111.
- Bakker, A.B. 2011. An evidence-based model of work engagement, *Current Directions in Psychological Science*, 20(4): 265-269.
- Bakker, A.B., Albrecht, S.L., & Leiter, M.P. 2011. Key questions regarding work engagement, *European Journal of Work and Organizational Psychology*, 20(1): 4-28.
- Bakker, A.B., & Demerouti, E. 2007. The job demands-resources model: State of the art, *Journal of Managerial Psychology*, 22(3): 309-328.
- Bakker, A.B., & Demerouti, E. 2008. Towards a model of work engagement, *The Career Development International*, 13(3): 209-223.
- Bakker, A.B., Demerouti, E., Taris, T.W., Schaufeli, W.B., & Schreurs, P.J.G. 2003. A multigroup analysis of the job demands-resources model in four home care organizations, *International Journal of Stress Management*, 10(1): 16-38.
- Bakker, A.B., Hakanen, J.J., Demerouti, E., & Xanthopoulou, D. 2007. Job resources boost work engagement, particularly when job demands are high, *Journal of Educational Psychology*, 99(2): 274-284.
- Balducci, C., Schaufeli, W.B., & Fraccaroli, F. 2011. The job demands-resources model and counterproductive work behaviour: The role of job-related affect, *European Journal of Work and Organizational Psychology*, 20(4): 467-496.
- Barnes, D.C., & Collier, J.E. 2013. Investigating work engagement in the service environment, *Journal of Services Marketing*, 27(6): 485-499.
- Breevaart, K., Bakker, A.B., Hetland, J., Demerouti, E., Olsen, O.K., & Espevik, R. 2014. Daily transactional and transformational leadership and daily employee engagement, *Journal of Occupational and Organizational Psychology*, 87: 138-157.
- Bryman, A., & Cramer, D. 2011. *Quantitative data analysis with IBM SPSS 17, 18 & 19: A guide for social scientists*. London: Routledge.
- Churchill, G.A.J. 1979. A paradigm for developing better measures of marketing constructs, *Journal of Marketing Research*, 14: 64-73.
- Collin, A. 2010. Learning and development. In J. Beardwell & T. Claydon (Eds.), *Human resource management: A contemporary approach*: 235-382. Harlow: Financial Times Prentice Hall.
- Cooper, H. 2008. Reporting standards for research in psychology: Why do we need them? What might they be?, *American Psychologist*, 63(9): 839-851.
- Crawford, E.R., LePine, J.A., & Rich, B.L. 2010. Linking Job Demands and Resources to Employee Engagement and Burnout: A Theoretical Extension and Meta-Analytic Test, *Journal of Applied Psychology*, 95(5): 834-848.
- De Lange, A.H., De Witte, H., & Notelaers, G. 2008. Should I stay or should I go? Examining longitudinal relations among job resources and work engagement for stayers versus movers, *Work & Stress*, 22(3): 201-223.
- Demerouti, E., Bakker, A.B., Nachreiner, F., & Schaufeli, W.B. 2001. The job demands-resources model of burnout, *Journal of Applied Psychology*, 86(3): 499-512.
- Development. (n/d). Retrieved from: <http://www.oxforddictionaries.com/>
- Finanstilsynet. (n/d). Lovsamling. Retrieved November, 24, 2014, from <https://www.finanstilsynet.dk/da/Reglerog-praksis/Lovsamling.aspx>

- Griffin, R. W. 1981. Supervisory behavior as a source of perceived task scope, *Journal of Occupational Psychology*, 54: 175-182.
- Hackman, J.R., & Oldham, G.R. 1980. *Work redesign*. Reading, MA: Addison-Wesley Publishing Company.
- Hinkin, T.R. 1998. A brief tutorial on the development of measures for use in survey questionnaires, *Organizational Research Methods*, 1(1): 104-121.
- Hobfoll, S.E., Johnson, R.J., Ennis, N., & Jackson, A. P. 2003. Resource loss, resource gain, and emotional outcomes among inner city women, *Journal of Personality and Social Psychology*, 84(3): 632-643.
- Hu, Q., Schaufeli, W.B., & Taris, T.W. 2011. The Job Demands-Resources model: An analysis of additive and joint effects of demands and resources, *Journal of Vocational Behavior*, 79(1): 181-190.
- Karasek, R.A. (1985). Job Content Questionnaire (Database record). Available from APA PsycNET PsycTESTS
- Larsen, H.H. 2009. HRM: ledelse af virksomhedens menneskelige ressourcer – Aktuell status over forskning og praksis samt et kig ind i fremtiden, *Ledelse & Erhvervsøkonomi*, 74(4): 7-19.
- Llorens, S., Schaufeli, W., Bakker, A.B., & Salanova, M. 2007. Does a positive gain spiral of resources, efficacy beliefs and engagement exist?, *Computers in Human Behavior*, 23(1): 825-841.
- MacKenzie, S.B., Podsakoff, P.M., & Fetter, R. 1991. Organizational citizenship behavior and objective productivity as determinants of managerial evaluations of salespersons' performance, *Organizational Behavior and Human Decision Processes*, 50: 123-150.
- Malhotra, N., Mavondo, F., Mukherjee, A., & Hooley, G. 2013. Service quality of frontline employees: A profile deviation analysis, *Journal of Business Research*, 66: 1338-1344.
- Mauno, S., Kinnunen, U., & Ruokolainen, M. 2007. Job demands and resources as antecedents of work engagement: A longitudinal study, *Journal of Vocational Behavior*, 70(1): 147-171.
- Nielsen, K., Randall, R., Yarker, J., & Brenner, S.O. 2008. The effects of transformational leadership on followers' perceived work characteristics and psychological well-being: A longitudinal study, *Work and Stress*, 22(1): 16-32.
- Piccolo, R.F., & Colquitt, J.A. 2006. Transformational leadership and job behaviors: The mediating role of core job characteristics, *Academy of Management Journal*, 49(2): 327-340.
- Podsakoff, P.F., MacKenzie, S.B., Lee, J.Y., & Podsakoff, N.P. 2003. Common method biases in behavioral research: A critical review of the literature and recommended remedies, *Journal of Applied Psychology*, 88(5): 879-903.
- Prieto, A.J. 1992. A method for translation of instruments to other languages, *Adult Education Quarterly*, 43(1): 1-14.
- Salanova, M., Lorente, L., Chambel, M.J., & Martinez, I.M. 2011. Linking transformational leadership to nurses' extra-role performance: the mediating role of self-efficacy and work engagement, *Journal of Advanced Nursing*, 67(10): 2256-2266.
- Schaufeli, W., & Taris, T. 2013. The Job Demands-Resources Model: A critical review, *Gedrag & Organisatie*, 26(2): 182-204.
- Schaufeli, W.B., & Bakker, A.B. (2004). *Utrecht Work Engagement Scale. Preliminary manual*. Retrieved from [http://www.wilmarschaufeli.nl/publications/Schaufeli/Test%20Manuals/Test\\_manual\\_UWES\\_English.pdf](http://www.wilmarschaufeli.nl/publications/Schaufeli/Test%20Manuals/Test_manual_UWES_English.pdf)
- Schaufeli, W.B., Bakker, A.B., & Salanova, M. 2006. The measurement of work engagement with a short questionnaire – A cross-national study, *Educational and Psychological Measurement*, 66(4): 701-716.
- Schaufeli, W.B., Bakker, A.B., & Van Rhenen, W. 2009. How changes in job demands and resources predict burnout, work engagement, and sickness absenteeism, *Journal of Organizational Behavior*, 30(7): 893-917.
- Sudman, S., & Bradburn, N.M. 1982. *Asking questions*. San Francisco: Jossey-Bass.
- Tuckey, M.R., Bakker, A.B., & Dollard, M.F. 2012. Empowering Leaders Optimize Working Conditions for Engagement: A Multilevel Study, *Journal of Occupational Health Psychology*, 17(1): 15-27.
- Xanthopoulou, D., Bakker, A.B., Demerouti, E., & Schaufeli, W.B. 2007. The role of personal resources in the job demands-resources model, *International Journal of Stress Management*, 14(2): 121-141.
- Xanthopoulou, D., Bakker, A.B., Demerouti, E., & Schaufeli, W.B. 2009a. Reciprocal relationships between job resources, personal resources, and work engagement, *Journal of Vocational Behavior*, 74(3): 235-244.
- Xanthopoulou, D., Bakker, A.B., Demerouti, E., & Schaufeli, W.B. 2009b. Work engagement and financial returns: A diary study on the role of job and personal resources, *Journal of Occupational and Organizational Psychology*, 82(1): 183-200.

- Xanthopoulou, D., Bakker, A.B., Demerouti, E., & Schaufeli, W.B. 2012. A diary study on the happy worker: How job resources relate to positive emotions and personal resources, *European Journal of Work and Organizational Psychology*, 21(4): 489-517.
- Yukl, G. 2012. Effective Leadership Behavior: What We Know and What Questions Need More Attention, *Academy of Management Perspectives*, 26(4): 66-85.

# Appendix A

Table A1. Development of the questionnaire tapping job resources provided by the immediate supervisor				
Domain	Operational definition	Items	Items - Danish translation	Number of items
<b>Purpose of the questionnaire</b> Total number of items 9 Number of subscales 3 Number of items per subscale 3 Scale type used Likert-type item unipolar summative scale Number of response categories 7 Response category labels Ranging from 'not at all' to 'a very great extent' Language administered in Danish	To estimate employee perceptions of the extent to which job resources are provided by their immediate supervisor	1. My closest supervisor gives me freedom in carrying out my work activities (adapted from Schaufeli, Bakker, & Van Rhenen, 2009). 2. My closest supervisor allows me opportunities to make my own decisions in my job (adapted from Balducci, Schaufeli, & Fraccaroli, 2011; Karasek, 1985). 3. My closest supervisor ensures that I have a say in my work (adapted from Karasek, 1985).	1. Min nærmeste leder giver mig frihed under udførelsen af mine arbejdsopgaver. 2. Min nærmeste leder lader mig tage mine egne beslutninger i mit job. 3. Min nærmeste leder sikrer, at jeg har medbestemmelse i mit arbejde.	3
		<b>Autonomy provided by the immediate supervisor</b> Autonomy is the degree of employee's decision authority in accomplishing their work tasks provided by their immediate supervisor (adapted from Xanthopoulos, Bakker, Demerouti, & Schaufeli, 2012, p. 493).		
		<b>Performance feedback provided by the immediate supervisor</b> Performance feedback is the information employees receive from their immediate supervisor about their past behaviors with respect to established standards of behaviors and results (adapted from Aguinis, 2009 as cited in Aguinis, 2012, p. 105).	1. Jeg modtager feedback fra min nærmeste leder om kvaliteten af min præstation. 2. Jeg bliver informeret af min nærmeste leder om resultaterne af mit arbejde. 3. Min nærmeste leder lader mig vide, hvor godt jeg klarer mig i mit job.	
<b>Opportunities for development provided by the immediate supervisor</b> Development is a process of employee's growth and advancement in their job provided by their immediate supervisor (adapted from Collin, 2010, p. 241; development, 2013).		1. My closest supervisor provides me opportunity to learn new things at my work (adapted from Bakker, Demerouti, & Verbeke, 2004; Schaufeli, Bakker, & Van Rhenen, 2009). 2. I receive possibilities to develop myself at work from my closest supervisor (adapted from Bakker, Demerouti, & Verbeke, 2004). 3. My closest supervisor offers me possibilities to grow and develop in my job (adapted from Van den Broeck, De Cuyper, Luyssch, & De Witte, 2012).	1. Min nærmeste leder giver mig mulighed for at lære nye ting i mit job. 2. Jeg får muligheder af min nærmeste leder for at udvikle mig på arbejde. 3. Min nærmeste leder giver mig muligheder for at vokse og udvikle mig i mit job.	3